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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,721	06/13/2005	Takahara Endo	05373/LH	6776
1933 7590 01/29/2008 FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708			EXAMINER FARAGALLA, MICHAEL A	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 01/29/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/538,721

Applicant(s)

ENDO ET AL

Examiner

Michael Faragalla

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-12 and 17-22 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 13-16 and 23-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Double Patenting***

1. Claims 1-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. US 7,069,005. Although the conflicting claims are not identical, they are not patentably distinct from each other because *the stated Patent above claims the same concept of current pending application 10/538,721, which is a method of analyzing a signal which is utilized in mobile communication system. The claimed method of patent number US 7,069,005 have the steps of detecting a signal, storing the signal to be measured, and then displaying the signal so it can be visually recognized. Therefore, Examiner considers both claimed inventions to be not patentably distinct.*

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 8-16, and 18-26 are rejected under 35 USC 101 for including a computer readable program code means, the claims do not show what kind of medium is the code embodied within for carrying the instructions of the claims.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 7, 8-12, and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morikawa et al (Publication number: US 2004/0059546)** in view of **Tanaka et al (Patent number: 5,825,817)**.

Consider Claims 1, and 17, Morikawa et al show a method, as well as a system for a mobile communication terminal, comprising:

(a) A step of preparing a test procedure control unit which possesses a procedure for carrying out a transition test for a connection state of a mobile communication terminal of a cellular system, and outputting control information including time setting information in accordance with the procedure from the test procedure control unit (figure 11; column 12, lines 23-37); (In FIG. 11, control or data exchange performed by

an operation unit 123 and a control unit 125 with respect to other major components is indicated by a double-line bus. The flows of signals, data, and timing signals between the main components required to understand the present invention are indicated by solid lines, even if the signal is a multi-bit one).

(b) A step of preparing a transmission/reception unit and in accordance with the control information from the test procedure control unit, generating a plurality of test signals including predetermined messages corresponding to a plurality of cells in the cellular system, and bursting the plurality of test signals in accordance with a scheduled time passage to thereby transmit the signals to the mobile communication terminal and receive a response signal including a predetermined message from the mobile communication terminal in the transmission/reception unit (column 12, lines 40-55); (A data processing unit 500 outputs the measured level obtained by the level measurement unit and the determination result obtained by the determination unit, corresponding to the base station information for specifying the base station extracted by the information detector 300).

(c) A step of preparing a reception measurement unit, and measuring a time domain waveform of the response signal including the predetermined message from the mobile communication terminal in the reception measurement unit (column 12, lines 40-55); (A timing signal generator 200 outputs a timing signal q which is synchronized with the burst waveform of a radio wave transmitted from each base station. On the basis of this timing signal q, a level measurement unit 400 measures the level of the received

radio wave. An information detector 300 extracts base station information necessary to specify the base station from digital data contained in the burst signal).

(d) A step of preparing a message log acquiring unit, and acquiring and storing messages and radio-communication time information when the transmission/reception unit and the mobile communication terminal exchange respective messages by means of the message log acquiring unit (column 13, lines 30-45); (The data processing unit 500 includes a data memory 15. In response to the timing signals h.sub.5, h.sub.6, and h.sub.7, the data processing unit 500 causes the data memory 15 to store the levels and the determination results corresponding to the base station information, and outputs the data).

(e) A step of preparing a display unit, and displaying measured results of the time domain waveforms from the reception measurement unit, and the radio-communication time information from the message log acquiring unit on the display unit (column 13, lines 48-67; figure 8).

(f) A step of preparing a display control unit, and carrying out processing for receiving the measured results of the time domain waveforms from the reception measurement unit and the radio-communication time information from the message log acquiring unit, and for causing to display graphs indicating the measured results of the time domain waveforms and a predetermined number of radio-communication markers indicating points in radio-communication time which correspond to the radio-communication time information by a graphic display capable of simultaneously comparing at both sides of the same time base on the display unit by means of the display control unit (column 13,

lines 48-67; figure 8); (A display unit 24 displays the data which is processed into various display formats in the data processing unit 500 and which the operator can readily recognize).

However, Tanaka et al show bursting the plurality of test signals, but do not specifically show varying the test signals.

In related art, Lynn et al show varying the test signals (abstract; figure 4).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Lynn et al into the teaching of Tanaka et al in order to be capable of storing network default and configuration data (Lynn et al; abstract).

Consider Claim 2, Tanaka et al as modified by Lynn et al show a test system for a mobile communication terminal, according to claim 1, wherein the display control unit has: a coordinate generating unit which divides a display screen of the display unit into at least a first region and a second region, and which causes to display a first coordinate where the abscissa is time and the ordinate is power level at the first region, and causes to display a second coordinate where the abscissa is a time base which is the same as the abscissa of the first coordinate and the ordinate is positions of the mobile communication terminal and the plurality of cells at the second region; a data display control unit which causes to display the graphs indicating the measured results of the time domain waveforms at the first coordinate displayed by means of the coordinate generating unit; and a radio-communication marker generating unit which

causes to display a predetermined number of radio-communication markers indicating points in radio-communication time which correspond to the radio-communication time information along the abscissa which is a time base of the second coordinate displayed by means of the coordinate generating unit (column 13, lines 40-47; column 10, lines 60-67; column 11, lines 1-10; figure 6); (the abscissa indicates the time axis for the received signal a, and the ordinate represents the signal level (dB). As in FIG. 6, base station numbers 13519, 10503, . . . , corresponding to the burst signal waveforms indicated by the signal level D.sub.1 are displayed).

Consider Claim 3, the combination of Tanaka et al and Lynn et al show a test system for a mobile communication terminal, according to claim 2, wherein the radio-communication marker generating unit, as the predetermined number of radio-communication markers, between the mobile communication terminal and respective positions of the plurality of cells on the ordinate in the second coordinate, causes to display capable of recognizing at least one of down radio-communication from the mobile communication terminal to one of the cells and up radio-communication from one of the cells to the mobile communication terminal, and capable of recognizing the points in radio-communication time which correspond to the radio-communication time information along the abscissa which is a time base of the second coordinate.

Consider Claims 5, 7, 12 and 22, Tanaka et al as modified by Lynn et al show the test system for a mobile communication terminal, according to claims 2, 11 and 21, wherein

the data display control unit causes to display capable of recognizing states from a start up to a time of responding at a point in time when a scheduled response is completed, accompanying a display of the corresponding radio-communication marker among the predetermined number of radio-communication markers displayed by means of the radio communication marker generating unit, at least one of the first and second coordinates along the abscissa which is a time base of the first and second coordinates displayed by means of the coordinate generating unit, and wherein the reception measurement unit includes a spectrum analyzer having a function of analyzing and measuring a response signal from the mobile communication terminal at a time domain (figure 11; column 12, lines 24-45; and column 13, lines 25-55).

Consider Claims 8 and 18, Tanaka et al as modified by Lynn et al show a test system for a mobile communication terminal, according to claims 2 and 17, wherein the test procedure control unit has a computer and computer readable program code means for causing the computer to carry out a transition test for a connection state of the mobile communication terminal of the cellular system, and outputs control information including time setting information in accordance with the computer readable program code means (column 13, lines 40-55).

Consider Claims 9 and 19, Tanaka et al as modified by Lynn et al show a test system for a mobile communication terminal, according to claims 8 and 18, wherein the determining unit, the message log acquiring unit, and the display control unit are

organized together with the test procedure control unit as software of the computer (column 13, lines 45-60).

Consider Claims 10 and 20, Tanaka et al as modified by Lynn et al test system for a mobile communication terminal, according to claims 9 and 19, wherein the computer readable program code means has:

(a) First computer readable program code means for causing the transmission/reception unit to generate a plurality of test signals including predetermined messages corresponding to a plurality of cells in the cellular system in accordance with the control information from the test procedure control unit, and to vary the plurality of test signals in accordance with a scheduled time passage to thereby transmit the signals to the mobile communication terminal and receive response signals including the predetermined messages from the mobile communication terminal (column 12, lines 40-55); (A data processing unit 500 outputs the measured level obtained by the level measurement unit and the determination result obtained by the determination unit, corresponding to the base station information for specifying the base station extracted by the information detector 300).

(b) Second computer readable program code means for causing the reception measurement unit to measure time domain waveforms of the response signals including the predetermined messages from the mobile communication terminal (column 12, lines 40-55); (A timing signal generator 200 outputs a timing signal q which is synchronized with the burst waveform of a radio wave transmitted from each base

station. On the basis of this timing signal q, a level measurement unit 400 measures the level of the received radio wave. An information detector 300 extracts base station information necessary to specify the base station from digital data contained in the burst signal).

(c) Third computer readable program code means for causing the message log acquiring unit to acquire and store messages and the radio-communication time information when the transmission/reception unit and the mobile communication terminal exchange the respective predetermined messages (column 13, lines 30-45); (The data processing unit 500 includes a data memory 15. In response to the timing signals h.sub.5, h.sub.6, and h.sub.7, the data processing unit 500 causes the data memory 15 to store the levels and the determination results corresponding to the base station information, and outputs the data).

(d) Fourth computer readable program code means for causing the display unit to display measured results of the time domain waveforms from the reception measurement unit and the radio-communication time information from the message log acquiring unit (column 13, lines 48-67; figure 8).

(e) Fifth computer readable program code means for causing the display control unit to carry out processing for receiving the measured results of the time domain waveforms from the reception measurement unit and the radio-communication time information from the message log acquiring unit, and to display graphs indicating the measured results of the time domain waveforms and a predetermined number of radio-communication markers indicating points in radio-communication time which

correspond to the radio-communication time information by a graphic display capable of simultaneously comparing at both sides on the same time base on the display unit (column 13, lines 48-67; figure 8); (A display unit 24 displays the data which is processed into various display formats in the data processing unit 500 and which the operator can readily recognize).

Consider Claims 11 and 21, Tanaka et al as modified by Lynn et al show the test system for a mobile communication terminal, according to claims 10 and 20, wherein the computer readable program code means further has: sixth computer readable program code means for causing the coordinate generating unit to divide a display screen of the display unit into at least a first region and a second region, and to display a first coordinate where the abscissa is time and the ordinate is power level on the first region, and a second coordinate where the abscissa is a time base which is the same as the abscissa of the first coordinate and the ordinate is respective positions of the mobile communication terminal and the plurality of cells on the second region; seventh computer readable program code means for causing the data display control unit to display the graphs indicating the measured results of the time domain waveforms at the first coordinate displayed by means of the coordinate generating unit; and eighth computer readable program code means for causing the radio-communication marker generating unit to display the predetermined number of radio-communication markers indicating points in radio-communication time which correspond to the radio-communication time information along the abscissa which is a time base of the second

coordinate displayed by means of the coordinate generating unit (figures 7A and 7B; column 3, lines 30-45); (the signal level of a burst signal from each base station and the corresponding base station information can be simultaneously displayed by measuring the signal level of the burst signal and reading out the base station information contained in that burst signal, it is therefore possible in the measurement site to immediately determine the base station which has transmitted the burst signal and to immediately check whether the signal level is normal or abnormal).

#### ***Allowable Subject Matter***

6. Claims 4, 6, 13-16, and 23-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Faragalla whose telephone number is (571) 270-1107. The examiner can normally be reached on Mon-Fri 7:30 am-5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Faragalla

01/15/2008

  
SUPERVISOR EXAMINER